

Application No.: 10/808,166  
Amendment Dated March 6, 2008  
Reply to Official Action of December 18, 2007

Amendments to the Drawings:

In view of the Official Action's objection to the drawings for being presented out of order, the attached replacement and new drawing sheets, which include FIGS. 8-12 and 14, present those figures in order (along with intervening FIG. 13).

Attachments: Replacement Sheets (FIGS. 8-12)  
New Sheet (FIG. 14)

### **REMARKS/ARGUMENTS**

Applicant appreciates the thorough examination of the present application, as evidenced by the first Official Action. The first Official Action objects to the drawings for being presented out of order; and objects to FIG. 13 for allegedly failing to illustrate the authentication matrix labels described on page 20, line 1 of the specification. The Official Action objects to the specification and Claim 45 for allegedly including typographical errors. The Official Action then rejects all of the pending claims, namely Claims 1-97, under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0013904 to Gardner. In response thereto, and as explained below, Applicant has amended the specification, drawings and claims to more clearly recite the claimed invention. And in view of the amendments to the specification, drawings and claims, and the remarks presented herein, Applicant respectfully requests reconsideration and allowance of all of the pending claims of the present application.

#### ***A. The Drawings are Proper***

The Official Action objects to the drawings for being presented out of order; and objects to FIG. 13 for allegedly failing to illustrate the authentication matrix labels described on page 20, line 1 of the specification. In response thereto, Applicant has amended the drawings, and in particular FIGS. 8-12 and 14, so that the different views are in their numeric order on the drawing sheets. As to the objection to FIG. 13, Applicant submits that FIG. 13 does in fact illustrate the authentication matrix labels described on page 20, line 1 of the specification. And to further demonstrate the illustration of FIG. 13, Applicant has amended the specification at page 20, line 1 to refer to the matrix labels "A3 E1 B2" shown in FIG. 13.

For at least the foregoing reasons, Applicant respectfully submits that the objections to the drawings are overcome.

#### ***B. The Specification and Claim 45 are Proper***

The Official Action objects to the specification and Claim 45 for including typographical errors. In response, Applicant has amended the specification and Claim 45 to correct the noted typographical errors, but note that Claim 45 (as amended) depends from Claim 42 and not Claim

44 as noted in the Official Action. Applicant therefore respectfully submits that the objections to the specification and claims are overcome.

***C. Claims 1-97 are Patentable***

Finally, the first Official Action rejects all of the pending claims, namely Claims 1-97, as being anticipated by Gardner. According to one aspect of the claimed invention, as reflected by amended independent Claim 1, an apparatus is provided that includes a processor configured to send, to a client, a set of a plurality of labels identifying a plurality of elements of an authentication matrix. As recited, the authentication matrix includes a plurality of elements organized in one or more columns and rows, each element of which is capable of being identified by a label that identifies the column and row of the respective element. As also recited, the set of labels is unknown at the client until the set of labels is sent thereto. The processor is configured to receive a passcode from the client formulated based upon the elements identified by the set of labels, and configured to authenticate the client based upon the formulated passcode.

In contrast to amended independent Claim 1, Gardner does not teach or suggest an apparatus for authenticating a client in which a set of labels identifying columns/rows of a matrix including elements from which a passcode is formulated are unknown at the client until that set is sent to the client. Briefly, Gardner discloses a method of remote authentication for secure system access and payment systems, in which the method makes use of a variable PIN (VPIN) which may vary across different occasions of use. As disclosed, the VPIN (alleged passcode) may be derived from numbers or letters (alleged elements) that may be randomly generated and held in a matrix or grid (alleged authentication matrix) available to the user, where those numbers/letters may be identified by grid references (alleged labels). In every embodiment of Gardner, however, the user knows upfront the grid references identifying the numbers/letters from which the VPIN is derived. In fact, Gardner explicitly discloses that “these grid references may relate to such things as the Weekday, the Date, the Month, the Use number for that day, the Time of day to the last complete hour, or indeed any other method of precisely indicating which grid reference applies to a particular and specific use.” Gardner, paragraph [0033] (emphasis

added). The set labels of the matrix from which the passcode of amended independent Claim 1 is derived, on the other hand, are unknown at the client until sent thereto.

Gardner discloses two primary manners of authentication based on a VPIN derived from a grid, namely a non-interactive manner and an interactive manner, again, both of which include the user knowing upfront the grid references (alleged labels) identifying the numbers/letters from which a VPIN is derived. Indeed, the fact that the user knows upfront the grid references enables the non-interactive manner of authenticating that user. In the interactive manner of authentication, Gardner may disclose particular numbers/letters identified by grid references and their order within a derived VPIN being unknown to the user until their selection by a master system. But even in this embodiment, the user still knows the grid references (alleged labels) from which those numbers/letters are selected. The client of amended independent Claim 1, on the other hand, does not know the set of labels (the elements of which a passcode is formulated) ahead of being sent that set of labels. And at least due to the fact that the user knows upfront the grid references enables the non-interactive manner of authenticating that user, Applicant respectfully submits that there is no apparent reason to modify Gardner to include this feature.

Applicant therefore respectfully submits that amended independent Claim 1, and by dependency Claims 2-8, 60 and 61, is patentably distinct from Gardner. Amended independent Claims 9, 17, 25, 33, 42, 51, 74, 82 and 90 include subject matter similar to that of amended independent Claim 1, including a set of labels identifying columns/rows of a matrix including elements from which a passcode is formulated are unknown at the client until that set is sent to or received by the client. Thus, Applicant also respectfully submits that amended independent Claims 9, 17, 25, 33, 42, 51, 74, 82 and 90, and by dependency Claims 10-16, 18-24, 26-32, 34-41, 43-50, 52-59, 62-73, 75-81, 83-89 and 91-97, are also patentably distinct from Gardner, for at least the reasons given above with respect to amended independent Claim 1.

For at least the foregoing reasons, Applicant respectfully submits that the rejection of Claims 1-97 as being anticipated by Gardner is overcome.

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### **CONCLUSION**

In view of the amendments to the specification, drawings and claims presented herein, Applicant respectfully submits that the present application is in condition for allowance. As such, the issuance of a Notice of Allowance is therefore respectfully requested. In order to expedite the examination of the present application, the Examiner is encouraged to contact Applicant's undersigned attorney in order to resolve any remaining issues.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



Andrew T. Spence  
Registration No. 45,699

**Customer No. 00826**  
**ALSTON & BIRD LLP**  
Bank of America Plaza  
101 South Tryon Street, Suite 4000  
Charlotte, NC 28280-4000  
Tel Charlotte Office (704) 444-1000  
Fax Charlotte Office (704) 444-1111  
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## APPENDIX

1. Replacement Sheets (FIGS. 8-12)
2. New Sheet (FIG. 14)